THE INFLUENCE OF SOCIAL CONTINGENCIES ON TEACHER EDUCATION STUDENTS UNDERTAKING A RURAL INTERNSHIP

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ABSTRACT

Hughes (1999) categorised non-work demands such as domestic responsibilities and health of family members (including self) as social contingencies. A literature review on social contingencies, examined from a medical, nursing, and allied health standpoint, revealed that certain factors, especially related to financial matters, impact directly on the professional experience or deter potential students from electing to participate in a rural-based experience. This review was then extended to include teacher education research but it was found that these studies were small in number, somewhat dated, and lacking a strong focus on what stressors arise beyond the classroom and the school for teacher trainees. The present study was planned to reduce existing gaps in the research literature and to better understand the effects of the professional experience in different residential settings by seeking to: 1. examine the predictive capacity of stress in relation to the perceived impact of social contingencies on internship learning; 2. identify factors which distinguish between those students who lived away and stayed at their usual term residence while undertaking an internship; and, 3. explore in greater detail the social contingencies, and other related factors, that influence learning during an internship. The sample consisted of 84 teacher education students attending an Australian regional university. These students were enrolled in the final semester of a four-year course and had just completed a 10-week internship in a rural or remote setting. A survey was the sole means of data collection. The survey data were analysed and the main findings were: financial pressure was viewed by the teacher trainees as the most prominent contingency impacting on their learning; the same trainees rated internet and phone access as the next two most important factors; and, two scales, labelled as personal/health care and life organisation were shown to be the only significant independent variables helping to distinguish between teacher trainees who lived away and those who stayed at their usual term residence during the internship. The implications of the study for course managers, course designers, rural educators, and policy makers conclude the paper.

INTRODUCTION

Numerous writers (see, for example, Knowles, Holton, & Swanson, 2005; Stack, 2004) have expressed the view that work and non-work demands can pull against each other affecting productivity. Hughes (1999) has gone a step further by identifying and categorising non-work demands such as domestic responsibilities, health of family members (including self) and financial pressure as 'social contingencies'. If professional practice is seen as work, social contingencies affecting university students during their professional placements might also include employment, transportation, geographic location, and social network disruptions.

While social contingencies are largely ignored in undergraduate curriculum documents, the expectations placed on students to successfully complete professional practice cause social contingency factors to become part of a hidden curriculum (Margolis, Soldatenko, Acker, & Gair, 2001). Research studies involving undergraduate professional placements are usually framed in the context of increasing graduate recruitment and retention into rural and under-serviced communities (MacRae, van Diepen, & Paterson, 2007; Playford, Larson, & Wheatland, 2006; Watson, Hatton, Grundy, & Squires, 1986) and tend to give little prominence to social contingencies. The notable exception being that financial burden is given some consideration, especially for the non-metropolitan placement of trainees in fields such as medicine and nutrition and dietetics (Wray & McCall, 2007).

Those studies focusing on pre-service teaching placements examine professional experience from either the teachers' or students' perspectives (Hastings 2008; Hartigan-Rogers, Cobbett, Amirault, & Muise-Davis, 2007) and are almost exclusively confined to professional practice in the workplace during work hours. Social contingencies are only ever mentioned briefly, if at all. Australian universities and some of their professional partners do acknowledge a few social contingencies, for example by offering on-campus health services and limited financial support mechanisms for students on away-from-home placements through Professional Placement Equity Grants (PPEG) and other scholarships.

In the same way that students learn from other sources than merely at university, and that professional development is inextricably linked to personal development, social contingencies must influence what, why and how students learn – sometimes advantageously and sometimes poorly. To what degree this occurs has not yet been revealed. This study aims to advance knowledge in this area.

LITERATURE REVIEW

Some attention to the notion of social contingencies has been evident in the medical, nursing, and allied health education research literature. This attention has been almost exclusively focused on university students undertaking rural remote professional experiences. For example, Neill and Taylor (2002) reported from their evaluative study that financial pressure resulting from a loss of part-time work, as well as the financial burden of the placement, were the two main concerns expressed a small sample of South Australian student nurses. These findings resonate with those of Playford et al. (2006) who studied allied health students in Western Australia. They noted that loss of income, transportation issues, and social dislocation were the major reasons why urban-based students were reluctant to nominate a rural placement preference. Similar findings have emerged from a Canadian study of allied health students conducted by MacRae et al. (2007). However, their work was more extensive in that students were also asked about the incentives that would attract them to under-serviced communities. The two strongest incentives were travel stipends and rent-free living arrangements.

Arguably, the most comprehensive study exploring social contingencies within a medical, nursing, and allied health context has been carried out by Wray and McCall (2007). Using data gathered from Victorian students studying a range of discipline areas e.g., medicine, midwifery, and radiography, they were able to identify five factors – income, transport, placement location, health and wellbeing, and debt – which caused students stress while participating in a lengthy clinical practicum. Wray and McCall (2007) contend that the four non-income factors also had a potential link with financial strain. To illustrate, a placement location in a setting many kilometres from one's usual term address could mean less time or no time to earn money as a part-time worker and therefore greater reliance on others and/or personal savings. And, this could lead to stressful feelings and health being put at risk.

Although there is a body of literature, albeit relatively small in its scope, pertaining to medical, nursing, and allied health education and social contingencies, a literature search concentrating on student teacher preparation demonstrated that the notion of social contingencies is an under-researched one. Even so, several key points can be distilled from a review of this small pool of literature. First, the studies were carried out in Australian settings and tended to focus mostly on both pre- and in-service teachers' experiences within the classroom, including community participation during working times (Yarrow, Ballantyne, Hansford, Herschell, & Millwater, 1999). Second, there was a view expressed that support networks could make a difference for teacher trainees undertaking extended rural practicums (Yarrow, Herschell, & Millwater, 1999). That is, professional and/or community links with trainees need to be forged to ensure that the placement is effective and meaningful. And third, research considering the stress experienced by students undertaking lengthy rural practicums is notably lacking, with the exception of the work carried out by Hemmings and Hockley (2002) almost a decade ago. They studied final year primary education students participating in a 10-week internship in rural New South Wales schools. Even though five categories of stress were identified through a content analysis, only one category related to social contingencies. This was labelled 'costs/living away from home' and was characterised by concerns expressed about travel expenses, finding accommodation, and returning home to meet part-time work commitments. The teacher trainees also reported on the coping strategies that they typically employed to alleviate stress associated with their internship; however, these tended to refer to classroom teaching episodes and encounters with poorly-behaved students. As a result, it was difficult to discern how these trainees were coping with non-work demands. Debatably, one shortcoming of this essentially qualitative study was that the relationship between various social contingency factors and stress was not considered.

To sum, the literature review on social contingencies examined from a medical, nursing, and allied health standpoint revealed that certain factors, especially related to financial matters, impact directly on the professional experience or deter potential students from electing to participate in a rural-based experience. This review was then extended to include teacher education research but it was found that these

studies were small in number, somewhat dated, and lacking a strong focus on what stressors arise beyond the classroom and the school for teacher trainees.

PURPOSE OF THE STUDY

The present study was planned to reduce existing gaps in the research literature pertaining to student teacher preparation, workplace learning and social contingencies. Consequently, the study sought to:

1. examine the predictive capacity of stress in relation to the perceived impact of social contingencies on learning during an internship;
2. identify factors which distinguish between those students who lived away and stayed at their usual term residence while undertaking an internship; and,
3. explore in greater detail the social contingencies, and other related factors, that influence learning during an internship.

METHOD

Participants

The sample consisted of year 4 teacher education students (n=84) attending an Australian regional university. These students were enrolled in the final semester of a Bachelor of Education (Primary) course and had just completed a 10-week internship in a rural or remote setting. Although the students nominated preferences for an internship placement, many were sent to schools located lengthy distances from their term residence and/or university campus. In fact, some of the participating schools were situated within a region extending more than 400 kilometres in most directions from the campus.

Instrumentation

A survey was the sole means of data collection. The survey was divided into two parts and used a range of question formats. Part 1 was designed to gather information about the student, including gender, employment status, and travel requirements. These questions required a categorised response only. Part 2 asked participants to make ratings on issues such as stress, learning, and social contingencies. Additionally, several open-ended questions were posed to gain further information about the internship and the influence of social contingencies during the internship.

Procedure

The survey was administered at a compulsory post-internship meeting. Even though participation in the study was voluntary, all 84 students who were at the meeting provided useable survey returns. All the statistical analyses of the survey data were conducted using SPSS (Version 16.0).

Analyses and results

Several calculations were made using data drawn from Part 1 of the survey. A breakdown by gender revealed that 66 females and 18 males were involved in the analysis. The average travelling time one-way (by car) was 167 minutes for the 42 who lived away from their usual term residence. Those who were able to undertake their internship near their term residence travelled, on average, about 21 minutes one-way. Forty-one students had part-time employment, while the other 43 were unemployed.

The social contingencies items in Part 2 of the survey were rated for their level of importance on a scale from 1 to 6. The scale's anchor points were *Not important* and *Extremely important.* Means and standard deviations were calculated for the items and these are detailed in Table 1, with the items listed in mean rank order. The rankings show that *financial pressure* was clearly the most important item and that *internet* and *telephone access* were also rated as rather important. *Domestic responsibilities* and *care of a family member* were rated as the least important social contingencies while on an internship.

Table 1*Means and standard deviations for the social contingencies items*

Item	Mean	Standard deviation
Financial pressure	4.96	1.49
Internet access	4.58	1.70
Telephone access	4.39	1.77
Transportation	4.23	1.71
Personal health/safety	4.14	1.58
Diet and food preparation	3.94	1.39
Geographic location	3.90	1.74
Accommodation	3.60	2.01
Domestic responsibilities	3.36	1.47
Care of a family member	2.90	1.96

The same 10 social contingencies items were also examined by a principal components analysis (PCA) with an oblique rotation. This analysis identified two factors which were interpreted as *personal/health care* and *life organisation*, and these accounted for approximately 59% of the variance. Nine of the items were used to delineate the components. The item dealing with financial pressure was deleted because of its low communality. The factor loadings for these items are presented in Table 2. Two subscales were then derived by adding the raw scores of each item

substantially loading on a particular factor. These totals were subsequently divided by the number of items in each subscale. The reliability coefficients for the two subscales were .72 and .83 respectively and therefore deemed to be more than acceptable. The two subscales were also uncorrelated (*r*=.167).

Table 2 ***Rotated matrix and factor names***

Item	Life organisation	Personal/health care
Domestic responsibilities	0.055	**0.785**
Diet and food preparation	0.271	**0.749**
Care of a family member	-0.124	**0.729**
Personal health/safety	-0.300	**0.703**
Transportation	**0.708**	0.065
Geographic location	**0.768**	0.071
Accommodation	**0.750**	0.153
Internet access	**0.816**	0.114
Telephone access	**0.805**	0.170

Other data obtained from Part 2 of the survey were used to produce a number of measures. These measures, along with the two subscales, are summarised in Table 3. It needs to be noted that those measures which were derived from the combination of several items to form a scale had kurtosis and skewness values within or close to the -1 and +1 range. This indicated that the respective distributions of each measure did not differ markedly from a normal distribution and that the measures would be appropriate for multivariate procedures (Tabachnick & Fidell, 2001).

Table 3 ***Description of measures***

Label of measure	Description
Work status	Work status: Dummy coded; Employed=0 and Unemployed=1
Daily routine	Change in daily routine: Scaled 1-5
Stress 1	Overall stress during internship: Scaled 1-3
Stress 2	Change in stress due to the workplace: Scaled 1-4
Impact	Impact social contingencies made on learning: Scaled 1-7
Health/personal care	Health/personal care: 4 items, range 1-6
Life organisation	Life organisation: 5 items, range 1-6

A multiple regression analysis was carried out to determine the predictive capacity of the two stress measures on the impact measure (refer to Table 4). Stress 1 was entered first to control for the influence of general stress. On its own it contributed 25.3% of the explained variance in impact. When Stress 2 was entered it accounted for a further 7.1% of the explained variance. Overall, the two stress measures accounted for over 32% of the total variance. If Stress 2 were entered singularly it accounted for about 22% of the total variance. Taken together, these findings indicate that stress associated with social contingencies was having a marked effect on learning during the internship.

Table 4 ***Multiple regression model of predictors of Impact***

Step	R^2	R^2 change	Standard error of estimate	F- change	Significance of F- change
1. Stress 1	.253	.253	1.137	27.729	.000
2. Stress 1, Stress 2	.324	.071	1.089	8.507	.005

A logistic regression analysis was performed as a way of distinguishing between those students who lived away from their usual term residence (42 cases) and those who did not (42 cases). Five measures/variables were included in the model and the omnibus test indicated an overall significant model (χ^2 (5)=21.959, p<.001). The results of this analysis demonstrated that two of the five predictor variables were significantly related at the five per cent level to the dependent variable; namely, *living away from term residence/staying at term residence* (refer to Table 5). Both personal/health care and life organisation were predictive of differential internship residence. The Cox and Snell R^2 and the Nagelkerke R^2 values were .23 and .307 respectively. These pseudo-R^2 measures can be treated quite similarly to R^2 in multiple regression analysis (McCoach & Siegle, 2003).

Table 5 ***Results of the logistic regression with all five predictor variables***

Predictor Variable	B	SE	WALD	df	p	Exp (B)
Daily routine	-.28	.25	1.28	1	.258	.753
Stress 2	-.23	.35	.456	1	.500	.792
Personal health/safety	.51	.25	4.34	1	.037	1.668
Life organisation	-.68	.22	9.67	1	.002	.508
Work status	.40	.54	.53	1	.466	1.484

Logistic regression is also used to predict (and classify) group membership from a combination of predictor variables (Tabachnick & Fidell, 2001). The results of the classification analysis are presented in Table 6 and show that 81.0% of the group who 'lived away from their term residence' were correctly classified; while, 29.6% of the group who 'stayed at their term residence' by their teachers were misclassified. The percentage of 'grouped' cases correctly classified was 76.2%.

Table 6 ***Classification results for those living away and those staying at term residence***

Actual Group	Number of Cases	Predicted	
		Living away	Staying at term residence
Living away	42	34 (81.0%)	8 (19.0%)
Staying at term residence	42	12 (29.6%)	30 (71.4%)

Note: Percentage of 'grouped' cases correctly classified (76.2%).

Both the classification results and the pseudo-R^2 measures imply that the tested model was a good fit to the data. Further support for this claim can be found by examining the results of the Hosmer-Lemeshow inferential goodness-of-fit test. This test yielded a χ^2 (8) of 9.105 (p=.333). As documented by Peng, Lee and Ingersoll (2002), an insignificant result of this magnitude is additional evidence of overall model fit.

The responses to the three open-ended questions were subjected to a content analysis. As defined by Stemler (2001, p. 3), "[c]ontent analysis is a systematic, replicable technique for compressing many words of text into fewer content categories based on explicit rules of coding". As a way of checking the appropriateness of the categories and the general rigour of the approach, it has been argued by various writers (see, for example, Hemmings, 2008; Weber, 1990) that a second rater needs to independently repeat the task being performed by the first rater. Borrowing from a technique described by Rourke and Szabo (2002), a second person independently coded a random sample of 25 per cent of the responses. The proportion of agreement (i.e., inter-rater reliability) between the two raters was approximately 0.95.

The content analysis of the responses to the first question (*Which social contingencies impacted on your learning during the internship?*) revealed five categories of response, namely, financial stress, general stress, travel issues, isolation, and felt well supported (see Table 7). This analysis was based on 55 responses.

Table 7 ***Summary analysis of responses to question: Which social contingencies impacted on your learning during the internship?***

Category	Percentage of total	Illustrative excerpt
1 Financial stress	34.5%	"Financial pressures were a significant problem"
2 General stress	30.9%	"It was a bit overwhelming moving there"
3 Travel issues	16.4%	"Transport was a concern"
4 Isolation	10.9%	"I felt extremely isolated"
5 Felt well supported	7.2%	"I had a strong support network"

More than a third of the trainees' comments related to financial pressure and many of these comments mentioned how losing work opportunities placed a drain on their finances. The following two comments are indicative of this position:

> *Could not work therefore had no money.*
> *Ten weeks off work meant living on a small budget.*

General stress was the second most prominent category emerging from the analysis. Some of these comments focused on the difficulty of coming to terms with a new school environment and others were linked to adjusting to a different community

setting. Approximately one in six of the teacher trainees referred to travel issues and how this impacted on their learning. Some student teachers described how excessive driving made them fatigued and reduced their time for lesson preparation and social interaction on weekends. About 10% of the trainees noted a feeling of isolation, and this would have been especially real for those living away from their usual place of residence.

Interestingly, not all of the comments were negatively framed. In fact, a small number of student teachers undergoing the rural-based internship felt that they received strong support and that collectively the social contingencies factors at play in their lives had a favourable effect on their learning and practicum experience. This is exemplified in the excerpt presented below:

> *I learned a lot about myself and my capabilities.*

Table 8 reports the results of the content analysis pertaining to the second question (*Were there any other factors that influenced your learning during the internship? [Positively, give details]*). Four categories emerged from 43 responses and were labelled supportive: school, supportive family, personal satisfaction, and supportive friends. Approximately half of the comments pertained to the school setting and many highlighted the encouragement the trainees received from various school personnel, including the principal and/or their supervising teacher. Some of the trainees also acknowledged how supportive their family and friends had been during the internship. In tandem, these comments accounted for about 30% of the responses. Close to a sixth of the comments fell within a personal satisfaction category. The following quote typifies this category:

> *I enjoyed the whole experience and just seemed to grow in confidence as the weeks rolled by.*

Table 8 ***Summary analysis of responses to question: Were there any other factors that influenced your learning during the internship? (Positively, give details)***

Category	Percentage of total	Illustrative excerpt
1 Supportive school	53.5%	"Positive working environment"
2 Supportive family	23.3%	"Family support networks"
3 Personal satisfaction	16.3%	"Really loved the community and the overall experience"
4 Supportive friends	6.9%	"My friends got me through some tough times"

Five categories based on 45 responses were developed from an analysis of the third and final question (*Were there any other factors that influenced your learning during the internship? [Negatively, give details]*). Unfortunately, many of the trainees misinterpreted this question and commented on social contingencies e.g., financial pressure and travel. These remarks should have been aligned with the first question. Nevertheless, several other categories, and particularly the responses comprising these categories, offer some additional insight into what factors had a negative

influence on learning during the internship (refer to Table 9). An excessive workload and communication problems with a supervising teacher were two issues that were noted as leading to certain challenges while on the internship. However, given that many of the other responses to the final question were not appropriately framed, it is difficult to draw many other firm conclusions from an analysis of this data set.

Table 9 ***Summary analysis of responses to question: Were there any other factors that influenced your learning during the internship? (Negatively, give details)***

Category	Percentage of total	Illustrative excerpt
1 Financial pressure	44.4%	"Lack of income impacted negatively"
2 Personal problems	15.6%	"Was a full-time carer for my grandmother therefore increased stress"
3 Isolation	11.1%	"Being away from normal social network made it a lonely time"
3 Excessive workload	11.1%	"Lack of sleep from too much work"
5 Travel issues	8.9%	"Travelling distance was huge"
5 Communication with supervisor	8.9%	"Communication problems with school"

DISCUSSION

Research relating to pre-service professional experience mainly concentrates on aspects within the school setting such as student-teacher relations and behaviour management and virtually ignores outside issues. The current study makes an important contribution to the literature relating to rural-based student teacher preparation because of its focus on social contingencies and how these affect teacher trainees who are undertaking an extended practicum. Emerging from two related analyses conducted in this study is the finding that *financial pressure* was viewed by the teacher trainees as the most prominent contingency impacting on their learning during their internship. This was particularly telling given that the mean rating, for this contingency factor, on a scale from 1 to 6 was close to 5 (i.e., falling between moderately important and extremely important), and that nearly 40% of the responses to an open-ended question mentioned financial pressure as an influential factor impacting on learning. Such a finding is not surprising as it mirrors the common message being relayed in research drawing on the views of medical, nursing, and allied health students undergoing their compulsory professional experience. That is, financial strain represented probably the single most pressing concern for those contemplating (Playford et al., 2006), or participating in, a rural clinical placement (see, for example, Neill & Taylor, 2002; Wray & McCall, 2007).

Apart from money matters, the teacher education students rated internet and phone access as the next two most important social contingency factors. Although evidence from the content analysis is not overly revealing, it could be surmised that these access factors were embedded in issues dealing with isolation and the support from both family and friends. In other words, having contact through phone and email

during the internship helped some students to reduce feelings of isolation and possible stress resulting from family and social dislocation. This finding resonates with the ideas espoused by Yarrow and his colleagues in their two articles published in 1999. Despite writing in a different era, they argued that social network development was a critical feature of a successful rural-based professional experience. Arguably, Generation X and Y teacher education students, as was the case in this study, are much more reliant on cutting-edge technologies and have high expectations with respect to usage, no matter the setting. The availability and reliability of internet access for these generations is as paramount for social networking as it is for lesson preparation and resource development. While residing in a rural and isolated setting, such technology provides a continued connection for these students to their existing, albeit distant, world of friends and family.

A major outcome from this the study was the construction of two scales: *personal/health care* and *life organisation*. These scales had sound psychometric properties and when used in a logistic regression analysis were shown to be the only significant independent variables helping to distinguish between teacher trainees who lived away and those who stayed at their usual term residence during the internship. For those that stayed at home, personal/health care issues were seen as more important predictors of learning in contrast to those who had an experience away from home. This is hardly surprising given that students with family and/or other domestic responsibilities were more likely to have viewed these issues as important when seeking to undertake their practicum whilst living at home. Nevertheless, it is worth noting that even though they were living at home, these personal/health care factors were still viewed as more important for these students. For students who were living away from home, life organisation factors tended to be rated as more important. Once again, this is not unexpected as living in a new environment would arguably bring these factors more to the fore.

One other interesting finding in relation to the principal component analysis was that the financial pressure item did not coalesce in the factor structure. This is somewhat surprising as the item seems to fit conceptually, even if loosely, with a life organisation factor. However, an inspection of some of its descriptive characteristics points out that the mean was much higher than any other item means and the standard deviation was relatively small. That is, a probable ceiling effect has meant that the item, as measured, is a poor one for particular analyses. Furthermore, its low standard deviation means that it has little to contribute to the PCA.

The research findings of Hemmings and Hockley (2002) have shown that participating in a rural-based internship can lead to considerable stress. In the present study, the results of a multiple regression analysis showed that, by controlling for overall stress, stress linked with social contingencies impacted on the learning of teacher education students during their internship. Given that the earlier finding was based on a content analysis of several open-ended questions, it could be argued that this finding in the present investigation is more powerful because of the robustness of the analytic technique being used. Nevertheless, future studies would

benefit from teasing apart the differential effect of individual social contingencies. In other words, are transportation or accommodation concerns, on average, creating more stress for interns? Unfortunately, it was not possible to determine this level of effect in the present study because of the limited sample size.

There are at least two other limitations inherent in the current study. First, only one student cohort was studied. Additional cohorts from other campuses and institutions would strengthen the design and allow for more confident generalisations. And second, the study relied on survey data only. A follow-up study would be well served if it included an interviewing phase to gather richer data, particularly centred on how the students managed any financial strain or why the issue of access to phone and internet services appeared to be such a crucial one. Of course, interviews with those who remain at their normal term address and those who take up a 'new' residence would offer some information not usually gained from a survey response.

From a practical perspective, the findings of this study suggest that course managers and policy makers, in particular, need to take heed of the study's major findings. To begin with, personal and health care concerns need to be addressed before and during an extended practicum. It is recommended that course managers call on the services of experienced counsellors to discuss with teacher trainees the typical stressors they will face if participating in a lengthy rural placement. Not only do these students need to recognise these stressors, but they need to learn effective coping strategies to counteract stressful episodes. The counselling also needs to be available during the placement time, especially if events, outside the boundary of the school, become too overwhelming. In such an occurrence, supervising teachers, counselling staff, and course managers need to be in contact to respond promptly and/or garner resources if required.

Both course managers and policy makers need to take action to better support teacher trainees with respect to financial matters. As discussed in the introduction, there are some grants and scholarships available e.g., PPEG for students to draw on but these are very limited. Given the importance of deploying newly recruited teachers to hard-to-staff locations and the need to have these teachers remain in these areas for reasons of continuity and capacity building, it is critical that more trainees accrue experience in these locations. One way of enticing trainees to gain this experience is to offer a range of financial incentives. Conceivably, these could include travel stipends, accommodation rebates, and generous living-away-from-home allowances. Considering the focus on an Australian 'education revolution' by the Federal 2007-2010 Labor government, perhaps it is timely that senior managers of education authorities and higher education institutions stake a claim for these kinds of incentive and support mechanisms that will create an impetus for real change to occur in rural schools and their respective communities.

How students (or their significant others) cope with social contingencies while on placement is often not explored unless a student submits a formal misadventure

application or is identified as being 'at risk' of failing professional practice. The more insights gained about our students the better our understanding of stressors and potential dislocations in their studies. The results of this study contribute meaningfully to this understanding and provide a firm foundation for future research dealing with professional practice and teacher preparation more generally.

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